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ELECTRO-OPTICAL DEVICE, METHOD OF MANUFACTURING THE SAME, AND
ELECTRONIC APPARATUS

BACKGROUND OF THE INVENTION

1. Field of Invention

[0001] The present invention relates to an electro-optical device having functional elements on a substrate, a method of manufacturing the same, and an electronic apparatus.

2. Description of Related Art

[0002] An organic electroluminescent display device (organic EL device) having organic electroluminescent elements corresponding to each pixel has excellent display capabilities, such as high brightness, spontaneous luminance, DC low voltage driving acceptability, high speed response, luminescence by a solid organic film, and the like. It is possible for the display device to be thinner, lighter and to have low power consumption, so thus the organic EL device is expected to be a display device placed after a liquid crystal display device in the future. In an organic EL device, an organic EL element controls power being supplied to electrodes by using a switching element such as a thin film transistor (TFT).

SUMMARY OF THE INVENTION

[0003] However, a conventional electro-optical device having the above-described organic EL device and the switching element has following problems that will be described hereinafter.

[0004] An electro-optical device can be formed by stacking a plurality of material layers, and more specifically, is formed by stacking a switching element and a functional element (organic EL element) on a substrate. Herein, if an irregularity difference of about 1 μm generates on a top face of the switching element, when a functional element is disposed above a switching element, an irregularity of the switching element affects the functional element disposed thereon, thereby resulting in deterioration of function of the functional element. In other words, the irregularity of the switching element causes the functional element (organic EL element) to also have an irregularity so that there is an influence on a display quality, such as deteriorations of luminous efficiency or brightness. Specifically, if an irregularity can be formed in an electrode of an organic EL element, a light-emitting layer or a hole-injecting layer, luminous efficiency or brightness deteriorates remarkably.

[0005] However, it is considered to suppress an influence of an irregularity of the switching element on the functional element by deviating the position of the switching